# THE TRIBE MEROPACHYDINI WITH DESCRIPTIONS OF FIVE NEW GENERA, SYNONYMICAL NOTES, AND A KEY TO THE GENERA (HETEROPTERA: COREIDAE: MEROPACHYDINAE) 

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Abstract.-Five new genera and six new species from Costa Rica, Brazil, Ecuador, Peru, and Bolivia are described in the tribe Meropachydini: Alcocerniella limonensis, Juaristiella pacificae, Larraldiella terminalis, Possaniella oblata, Soteloniella perparvula, and Soteloniella scutellata. Menardus Distant is proposed as a new junior synonym of Peranthus Stål, and Menardus notatus (Walker) is transferred to the genus Peranthus, resulting on the new combination Peranthus notatus (Walker). A key to the 11 known genera of Meropachydini is given.

Key Words: Insecta, Heteroptera, Coreidae, Meropachydinae, new genera, new species, Neotropical

Stål (1867) provided a key to the genera of Meropachydinae, and later Stål (1870) listed species included in each genus. Distant (1881-1892, 1900) made some changes in the generic placement primarily of species described by Walker (1871). Since that time, taxa of this subfamily have received little attention with a few exceptions (Kirkaldy 1904, Schmidt 1911, Kormilev 1951, 1954, Alayo Pastor 1967, Froeschner 1981, Baranowski and Slater 1986, Packauskas 1994).

The subfamily Meropachydinae Stål restricted to the Western Hemisphere, is a relatively small, but diverse group of Heteroptera characterized primarily by having the distal end of the hind tibiae ending beneath in a short projecting spine, hind femora curved and usually strongly incrassate, and hind coxae far separated. The subfamily includes 15 genera separated into three tribes: Merocorini (1), Meropachydini (7), and Spathophorini (7) (Kormilev 1954, Packauskas 1994).

The new genera belong to the tribe Meropachydini which are recognized by the elongate scutellum which extends beyond the distal end of the clavus, hind acetabulae projecting laterally and visible in dorsal view, and hind tibiae broadly curved distally.

In this revision five new genera and six new species collected in Costa Rica (1), Brazil (4), Ecuador (1), Peru (1) and Bolivia (1) are described, the genus Menardus Distant (1900) is proposed as a junior synonym of Peranthus Stål (1867), and Menardus notatus (Walker) is transferred to the genus Peranthus, with the binomen Peranthus notatus (Walker).

The following abbreviations are used for the institutions cited in this paper: AMNH (American Museum of Natural History, New York); BMNH (The Natural History Museum, London); BPBM (Bernice P. Bishop Museum, Honolulu); CAS (California Academy of Sciences, San Francisco): CMN (Carnegie Museum of Natural His-
tory, Pittsburgh); INBIO (Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica); LACM (Los Angeles County Natural History Museum, Los Angeles); MNR (Museum Nacional, Rio de Janeiro, Brasil); UB (University of California, Berkeley); UNAM (Instituto de Biología, Universidad Nacional Autónoma de México); USU (Utah State University, Logan); ZMB (Museum der Humboldt, Universität zu Berlin, Germany).

## Features in Common of the Genera Described

Head: Wider than long, pentagonal, non declivent, dorsally flat; tylus unarmed, apically globose, elevated, extending anteriorly to and laterally higher than juga and antenniferous tubercles; juga unarmed, shorter than tylus; space between antenniferous tubercles filled by tylus; antenniferous tubercles unarmed, never contiguous; space between antenniferous tubercles almost wider than one tubercle; side of head in front of eye unarmed; antennae shorter than body; antennal segment I robust, barely flattened, thickest, slightly curved outward, longer than head; segments II and III flattened, sulcate, slender; segment IV fusiform, weakly incrassate; antennal segment IV the longest, III the shortest, and I longer than II; ocelli close to eyes; preocellar pit obliquely deep; eyes globose, slightly protuberant, based on an hypothetical line upper margin located almost at same level of vertex and frontal area; postocular tubercle absent; mandibular plate absent; head ventrally and behind buccula without or with conical tubercle; buccula rectangular or almost quadrate, raised, short, entire, projected or not beyond antenniferous tubercles, meeting posteriorly and closed; rostrum short, barely reaching anterior or middle third of mesosternum.

Thorax: Pronotum: Wider than long, trapeziform, slightly declivent, wider than base of scutellum; collar wide; frontal angles obtuse, not projected; humeral angles obtuse or barely projected; calli entire, not elevated, separated at midline by a short
and wide longitudinal furrow; anterior margin entire, slightly curved; anterolateral margins obliquely straight, smooth or tuberculate, and emarginate or not; posterolateral margins sinuate and smooth; posterior border convex or barely straight, margin without or with an irregular transverse ridge; triangular process absent or well developed. Prosternum markedly sunken, with posterior third in front of area between fore legs produced into narrowed acute tubercle; mesosternum raised or not, with anterior margin in front of area between fore legs produced into narrowed subacute tubercle, posterior margin variable throughout genera; lateral margins of mesopleuron raised on a short or medium-size elongate tubercle, overlapping or not propleuron; metasternum variable throughout genera; posterior margin of metathorax straight, with lateral angles projected into wide conical tubercles, touching the hind coxae; metathorax laterally expanded, in dorsal view with metapleura and acetabulae weakly or prominently visible; metathoracic peritreme located near lower margin of metapleuron, with upper third closed; canal short, semicircular, with raised sides; evaporating area poorly developed; anterior lobe variable throughout genera, posterior lobe short, obtuse, slightly exposed.

Legs: Hind coxa strongly separated, armed or unarmed, visible beyond costal margins and sides of body in dorsal view; hind trochanter conspicuously tuberculate and exposed, or weakly convex; fore and middle femora relatively slender, unarmed or armed with one to three subdistal tubercles; hind femur markedly incrassate, with dorsal surface smooth or tuberculate and ventral surface strongly armed with spines and tubercles; fore and middle tibiae unarmed, sulcate, and slightly expanded at posterior third; hind tibia curved, compressed, shorter than femur, with outer margin not expanded and remarkably sulcate, inner margin usually markedly expanded, and apically armed with a broad long spine; fore and middle tarsi with tarsal segment I
equal or slightly shorter than segments II and III combined; hind tarsus with segment I longer or shorter than segments II and III combined.

Scutellum: Longer than wide, and always longer than clavus; general shape variable throughout genera; disc with or without Y-shaped elevation.

Hemelytron: Macropterous, reaching apex of or slightly beyond last abdominal segment; claval suture present but covered by apex of scutellum; clavus partially covered by scutellum; costal margin shallowly concave; apical margin obliquely straight or slightly concave, with apical angle narrowly, very long, extending beyond middle third of hemelytral membrane.

Abdomen: Gradually narrowing beyond middle, and slightly expanded posteriorly; abdominal segment VII of male usually laterally exposed; connexival segments scarcely elevated, clearly sulcate; posterior angle of each segment entire, not expanded into spine; abdominal sternum without medial furrow; abdominal spiracle elliptical; abdominal spiracle III closer to anterior border, spiracles IV to VII closer to middle third; abdominal sternite II visible, slender, with or without conical tubercle located close to posterior border of metathorax; abdominal sternite III weakly or clearly expanded, and in dorsal view with spiracle visible.

Female genitalia: Abdominal sternite VII with plica and fissura; plica triangular; fissura with inner margin overlapping; gonocoxae I subtriangular, in caudal view closed, in lateral view almost straight, with upper border rounded; paratergite VIII triangular, with spiracle visible; paratergite IX squarish, longer than paratergite VIII.

## Key to Genera of Meropachydini

1. Posterior border of pronotum with a triangular projection above each basal angle of scutellum
Posterior border of pronotum without triangular projections . . . . . . . . . . . . . . . . . . .
2. Head ventrally behind buccula with a strong
conical tubercle ( $=$ Menardus Distant) Peranthuts Stål
Head ventrally behind buccula smooth, without a tubercle at most with an irregular callosity

3
3. Scutellar disc without a distinct $Y$-shaped elevation; posterior margin of mesosternum at each side with one short lobe touching anterior lobes of metasternum (Figs. I $1-12$ ): posterior margin of metasternum flat: dorsal surfaces of hind femora smooth

4
Scutellar dise with a clearly Y-shaped elevation: posterior margin of mesosternum at each side with one large lobe freely projecting backwards and bending up, not touching anterior lobe of metasternum (Figs. 6-10, 13): posterior margin of metasternum at middle third with a deep depression of capsule-like appearance: dorsal surface of hind femura weak to strongly tuberculate from base to apex
4. Scutellum remarkably slender abruptly narrowed on distal half, apex bifid (Fig. 2I): antennal segment I slender, less than 2.05 mm ; metapleura not laterally expanded; hind femur scarcely incrassate; inner face of hind tibia weakly expanded; abdominal sternite 1 II of male with small lateral prominences . . . .

Larraldiella, new genus

- Scutellum not remarkably slender, narrowing very gradually, apex rounded: antennal segment I robust. longer than 2.10 mm ; metapleura laterally expanded: hind femur conspicuously incrassate; inner face of hind tibia expanded; abdominal sternite III of male smooth, without lateral prominences .... Gracchues Stål

5. Dorsal surface of hind femur strongly tuberculate from proximal to distal end: hind trochanter convex, not tuberculate: scutellum 1.7 to 2.2 times longer than wide, and apically rounded: anterior margins of thoracic mesopleura each with a black elongate spot . . . Marichisme Kirkaldy Dorsal surface of hind femur weakly tuberculate from proximal end to middle third (Fig. 22): hind trochanter tuberculate; scutellum 3.3 to 3.8 times longer than wide, and apically acute; anterior margins of thoracic mesopleura without black spot . . Soteomiella, new genus
6. Head ventrally and behind buccula with a strong conical tubercle

7

- Head ventrally and behind buccula smooth, without a tubercle

9
7. Hind femur conspicuously clavate, slender towards base, and abruptly thickened beyond middle (Fig. 23) . . . . . Possaniella, new genus


Figs. 1-5. Metathoracic peritreme. 1, Flavius lineaticornis. 2, Soteloniella perpantula. 3, Juaristiella pacificae. 4, Alcocerniclla limonensis. 5, Larraldiella terminalis.

- Hind femur never clavate, uniformly incrassate (Figs. 19-20)

8. Middle third of posterior margin of metasternum flat, without lateral lobes (Fig. 10): anterior lobe of metathoracic peritreme with a black lunular spot (Fig. 1); body surface densely pubescent: scutellum clearly contracted near base; dorsal surfaces of hind femm strongly tuberculate . . . . . . . . . . . Flavius Stål

- Middle third of posterior margin of metasternum with two lateral lobes (Figs. 6-8); anterior lobe of metathoracic peritreme toothshaped without a black hunular spot (Figs. 3 4): body surface not densely pubescent; scutellum not contracted near base; dorsal surfaces of hind lemur smooth

Alcocerniella, new genus
9. Posterior margin of mesosternum trilobed, with mesial lobe expanded and broad, and lateral lobes short (Fig. 9); scutellum strongly contracted near the base; scutellar dise with a broad Y -shaped elevation

Meropachys Burmeister

- Posterior margin of mesosternum bilobed (Figs. 6-7); scutellum not or weakly contract-
C- ed near base: scutellar dise without a distinct Y-shaped elevation . . . . . . . . . . . . . . . . 1

10. Posterior margin of metasternum bilobed (Fig. 6) . . . . . . . . . . . . . . . . . . Hirilcus Stål

- Posterior margin of metasternum projected in a medial quadrangular plate directed straight downward (Fig. 7) . . . Juaristiella, new genus


## Alcocerniella Brailovsky, new genus

Diagnosis.-Alcocerniella and Flavius Stål are the only known genera in the tribe Meropachydini that have the head ventrally with a conical tubercle behind the bucculae, triangular process on posterior margin of pronotum well developed, mesosternum almost raised, and the hind coxa with outer apical angle strongly tuberculate.

Alcocerniella differs from Flavius by the following characters: Anterior lobe of metathoracic peritreme globose, without a black lunular spot (Fig. 4), scutellum not contracted near base, hind femur in dorsal view
smooth, body surface not densely pubescent, mesosternum slightly raised, and middle third of posterior margin of metasternum with two lateral lobes (Fig. 8). In Flavins the anterior lobe of the metathoracic peritreme has a black lunular spot (Fig. 1), scutellum clearly contracted near base, hind femur in dorsal view strongly tuberculate, body surface heavily covered with whitish pubescence, mesosternum conspicuously raised, middle third of posterior margin of metasternum flat, without lateral lobes (Fig. 10).

A unique character in the male of Alcocerniella is the conical tubercle on abdominal sternite III, absent in Flavius.

Generic description.---Head: Distance between ocelli 2.4 to 2.6 times diameter of one ocellus; distance between ocelli and eye 0.9 to 1.1 times diameter of one ocellus; head ventrally and behind buccula strongly tuberculate; rostrum short, barely reaching anterior third of mesosternum; rostral segment III shortest, IV longest, I longer than II.

Thorax: Pronotum: Humeral angles obtuse, not exposed; anterolateral borders obliquely straight, almost smooth, not emarginated; posterior border barely convex; triangular process broad, apically rounded. Mesosternum weakly raised, anterior margin in front of area between fore legs produced into a narrowed subacute tubercle, posterior margin between middle legs prominent, bilobed, each lobe well separated from mesial line, overlapping the lobes of anterior margin of metasternum; metasternum slender, rectangular, anterior margin remarkably raised on two large lobes, separated along midline by a wide furrow; each lobe touching the two lobes of posterior margin of mesosternum; posterior margin of metasternum almost straight, each lateral angle projected as a broad rectangular plate, laying against metacoxae, and at middle third with two lateral lobes delimiting a barely hemispherical capsulelike depression (Fig. 8); lateral margin of mesopleura raised as an elongate tubercle
overlapping the posterior margin of propleuron; metathorax laterally expanded, in dorsal view metapleura and acetabulae very broadly visible. Anterior lobe of metathoracic peritreme globose (Fig. 4).

Legs: Hind coxae well separated, distance between them nearly 3.4 to 3.8 times the diameter of one coxa, outer apical angle strongly tuberculate; hind trochanter convex; fore femur relatively slender, unarmed; middle femur relatively slender, ventrally with 1 to 3 subdistal tubercles; hind femur markedly incrassate, attaining apex or posterior margin of last abdominal sternite with dorsal surface smooth, ventrally armed with spines and tubercles in two irregular rows, without a strong tooth close to base; inner margin of hind tibia well expanded.

Scutellum: 1.8 to 2.1 times longer than wide, longer than clavus, not coarctate near base; disc with Y-shaped elevation; apex subacute; lateral margins clearly emarginate.

Abdomen: Abdominal sternite II visible, slender, without conical tubercle; abdominal sternite III clearly expanded, in dorsal view with spiracle visible; male abdominal sternite III laterally conspicuously produced into two large conical lobes freely directed downwards; female abdominal sternite III flat, without conical lobes.

Male genitalia: Genital capsule simple, semiglobose; posteroventral edge entire, straight, with small medial plate, and laterally with the angles rounded. Paramere: Simple and straight; anterior lobe convex, continuous with body, apex curved, narrowly blunt (Fig. 15).

Female genitalia: Spermatheca: Bulb somewhat elongated; spermathecal duct moderately coiled proximally, with only two distal coils; flank distinct; chamber more or less globose (Fig. 14).

Integument: Body surface with mixed short and large decumbent to suberect hairs; head, calli, clavus, corium, prosternum, mesosternum, metasternum, and abdominal sterna impunctate; pronotum strongly punctate, abruptly striate; scutellum punctate,


Figs. 6-13. Thorax in ventral view showing mesosternum and metasternum. 6, Hirilcus gracilis. 7, Juaristiella pacificae. 8, Alcocerniella limonensis. 9, Meropachys nigricans. 10, Flavius lineaticornis. 11, Larvaldiella terminalis. 12, Gracchus integer. 13. Soteloniella perpariula.
except lateral margins and Y -shaped elevation (arms of Y -shaped finely striate); propleura, posterior margin of metapleura, and acetabulae punctate; metapleura weakly tuberculate; antennal segments and legs densely covered with short decumbent to suberect setae.

Etymology.—Named for Jorge Alcocer Varela, distinguished Mexican immunologist.

Type species.-Alcocerniella limonensis Brailovsky, new species.

## Alcocerniella limonensis Brailovsky, new species

(Figs. 4, 8, 14-15, 19)
Description.-Measurements: Male: Head length 1.75 ; width across eyes 2.30;
interocular space 1.20; interocellar space 0.45 ; distance ocellus to eye 0.20 ; diameter of ocellus 0.17 ; preocular distance 1.10 ; length antennal segments: 1, 3.55; II, 2.95; III, 2.60; IV, 4.20; length rostral segments: I, 0.77 ; II, 0.58 ; III, 0.55 ; IV, 0.80 . Pronotum: Total length 4.45; width across frontal angles 2.25; width across humeral angles 5.40. Scutellar length 5.50; maximum width of anterior lobe 2.25 ; maximum width of posterior lobe 1.40. Hind leg: femur length 8.74; tibia length 5.82. Total body length 18.20 .

Female: Head length 1.60 ; width across eyes 2.05 ; interocular space 1.05 ; interocellar space 0.45 ; distance ocellus to eye 0.17 ; diameter of ocellus 0.15 ; preocular distance 1.03; length antennal segments: I, 2.85; II,
2.30 ; III, 2.15 ; IV, 3.80 ; length rostral segments: I, 0.65; II, 0.62; III, 0.52; IV, 0.74 . Pronotum: Total length 3.90; width across frontal angles 2.25 ; width across humeral angles 4.55 . Scutellar length 4.15 ; maximum width of anterior lobe 1.90; maximum width of posterior lobe 0.95 . Hind leg: femur length 6.91; tibia length 5.16. Total body length 15.72 .

Dorsal coloration: Male: Head bright chestnut yellow with olive green reflections; antennal segment I with dorsal face dull chestnut orange and ventral face reddish brown; segments II and III reddish brown, IV with basal third reddish brown, middle and distal third dark reddish orange; pronotum chestnut yellow with three broad longitudinal stripes, posterior margin, and humeral angles pale to dark olive green; scutellum bright orange yellow with bright red longitudinal medial stripe; clavus and corium dark olive green to dark brown, with veins yellow and with or without olive green reflections; hemelytral membrane dark ambarine with veins and basal angle black: connexival segments I to VI yellow, and VII black; abdominal segments black, with abdominal scars IV-V and V-VI yellow. Ventral coloration: Head pale bright chestnut orange with olive green reflections; rostral segments dark bright chestnut orange with olive green reflections (apex of IV black); prothorax orange yellow with reddish orange spot near fore acetabulae, posterior margin of propleura olive green with punctures reddish brown: mesosternon mostly black; mesopleuron bright orange yellow with reddish orange spot near to middle acetabulae, and close to middle third of the same mesopleuron; metathorax bright orange with anterior and posterior tubercles darker to black; upper face of hind acetabulae bright orange with olive green reflections and irregular red spot near to dorsal edge; metathoracic peritreme black with anterior lobe with pale ochre reflections; fore and middle legs, with coxae, and trochanters bright chestnut orange, femora and tibiae yellow with olive green reflections and
tarsi reddish brown; hind leg with coxa bright orange, trochanter bright reddish brown, femur bright orange with spines and tubercles reddish brown. tibia and tarsus bright black to reddish brown; abdominal sterna bright chestnut orange with tubercles of abdominal sternite III and posterior margin of VII reddish brown; pleural abdominal sterna III to VI bright orange yellow, and VII black with olive green reflections; genital capsule bright chestnut orange.

Female: Similar to male. Connexival segments VIII and IX dark chestnut orange; abdominal segments VIII and IX black; genital plates bright chestnut orange, outer border of paratergite VIII and IX black; plica black; hind tibia bright black with pale yellow fascia close to the apical third; abdominal sternite III without lateral tubercles.

Variations in coloration: 1, Pronotum chestnut orange with olive green reflections, and three irregular longitudinal stripes black to dark olive green. 2, Clavus and corium with veins pale olive green. 3, Corium dark olive green to dirty yellow with olive green reflections. 4, Anterior lobe of metathoracic peritreme pale yellow. 5, Hind tibia bright black, basal join and outer surface chestnut orange. 6, Posterior margin of metathorax creamy yellow to yellow, with olive green reflections. 7, Mesosternum bright chestnut orange. 8, Area around each abdominal spiracle reddish orange. 9, Tubercles of abdominal sternite III bright orange.

Type material.—Holotype: © , Costa Rica, Prov. Limon, Estac. Hitoy Cerere, R. Cerere, Res. Biol. Hitoy-Cerere ( 1000 m ), July 1992, G. Carvallo (INBIO). Paratypes: COSTA RICA: 2 ठ 1 ㅇ, Prov. Guanacaste, Estac. Pitilla, 9 km. S. Sta Cecilia ( 700 m ), May and August 1988, G. N. P. Biodiversity Survey, $85^{\circ} 25^{\prime} 40^{\prime \prime} \mathrm{W}-10^{\circ} 59^{\prime} 26^{\prime \prime} \mathrm{N}$ and November 1988, C. Chaves and M. Espinoza (INBIO, UNAM); 4 ठ̃, Prov. Heredia, Estac. Magsasay, P. N. Braulio Carrillo (200 m), March 1991, A. Fernandez, May 1991, M. A. Zumbado (INBIO, UNAM); 1 ¢,


Figs. 14-18. 14-15, Alcocerniella limonensis. 14, Spermatheca. 15, Paramere. 16-17, Juaristiella pacificae. 16. Spermatheca. 17, Paramere. 18. Spermatheca of Hirilcus gracilis.

Prov. Puntarenas, Estac. Biol. Las Alturas, Coto Brus ( 1500 m), January 1992, M. Ramirez, G. Mora and F. Quesada (INBIO); 1 ㅇ, Golfito, 26 July 1981, B. K. Dozier (USU); 1 §, Prov. Cartago, 3 km . SE, Turrialba, CATIE ( 600 m ), 13-16 May 1985, J. Doyen (UB); 1 ㅇ, Prov. Limon, Hacienda Tapezco, 29 air Km, W. Tortuguero, $10^{\circ} 30^{\prime} \mathrm{N}-83^{\circ} 47^{\prime} \mathrm{W}(40 \mathrm{~m}), 13$ March 1978 , J. P. Donahue, D. Penny, D. Moeller, and C. Lewis (LACM); 1 すै, Prov. Limon, Siquirres ( $100-200 \mathrm{~m}$ ), 16 August 1970, J. and M. Sedlacek (BPBM).

Etymology.-The species is named for the Province of Limon in Costa Rica.

Distribution.-Known only from Costa Rica.

## Juaristiella Brailovsky, new genus

Diagnosis.-Alcocerniella, Flavius, Hirilcus, Meropachys, Possaniella, and Juaristiella are the only known genera in the tribe Meropachidini with a triangular process on posterior border of pronotum.

In Alcocerniella, Flavius and Possaniel$l a$, the head in ventral view has a tubercle behind buccula, in Hirilcus the tubercle is absent or barely developed, and in Meropachys and Juaristiella always absent. In Meropachys the posterior margin of mesosternum between middle legs is trilobed, with medial lobe expanded and broad, lateral lobes shorter, the posterior margin of metasternum simple and straight (Fig. 9). In

Hirilcus and Juaristiella the posterior margin of mesosternum is bilobed (Figs. 6-7).

Juaristiella is clearly segregated from Hirilcus because the posterior margin of the metasternum is projected into a medial quadrangular plate directed straight downward (Fig. 7), and the spermathecal bulb is elongated with the proximal third barely coiled (Fig. 16). In Hirilcus the posterior margin of the metasternum is projected into two lateral and broad conical tubercles (Fig. 6), and the spermathecal bulb is almost flattened, with the proximal third conspicuously coiled (Fig. 18).

Generic description.-Head: Distance between ocelli 4.0 to 4.2 times the diameter of one ocellus; distance between ocellus and eye 0.8 times the diameter of one ocellus; head ventrally and behind buccula without tubercle; rostrum short, barely reaching anterior third of mesosternum; rostral segment III shortest, IV longest, I longer than II.

Thorax: Pronotum: Humeral angles obtuse, barely exposed; anterolateral borders obliquely straight, tuberculate, weakly emarginate; posterior border convex; triangular processes broad, apically rounded; pronotal disc and calli with tubercles or irregular elevations. Mesosternum not raised, anterior margin in front of area between fore legs produced into narrowed subacute tubercle, and posterior margin between middle legs bilobed, with each lobe almost touching at mesial line and projecting towards metasternum, laying between tubercles of anterior margin of metasternum; metasternum slender, rectangular, with anterior border distinctly raised as two broad lobes, separated along midline by short furrow; each lobe touching the two lobes of posterior margin of mesosternum; posterior margin of metasternum projected into a mesial quadrangular plate directed straight downward (Fig. 7); lateral margin of mesopleura raised on an elongate callosity; metathorax laterally expanded, in dorsal view with metapleura and acetabulae remarkably visible. Anterior lobe of metatho-
racic peritreme strongly exposed, semiglobose, curving upward (Fig. 3).

Legs: Hind coxa strongly separated, with outer apical angle scarcely tuberculate; distance between them 4.0 to 5.0 times diameter of one coxa; hind trochanter convex; fore and middle femora slender, unarmed, without tubercles; hind femur markedly incrassate, not attaining apex of abdomen, reaching middle third of abdominal sternite VI; dorsal surface with few scattered callosities, similar to tubercles, ventrally armed with five subapical spines and four tubercles in one irregular row; inner margin of hind tibia markedly expanded.

Scutellum: 2.1 ( ${ }^{\circ}$ ) to 3.0 ( 8 ) times longer than wide, elongate, longer than clavus, slightly contracted near base; disc with Yshaped elevation; apex subtruncated or rounded; lateral margins emarginated.

Abdomen: Abdominal sternite II visible, slender, with medium sized conical tubercle close to lateral angle and near to metacoxae; abdominal sternite III expanded, in dorsal view with spiracle visible.

Male genitalia: Genital capsule simple, semiglobose; posteroventral edge with broad tongue-like middle plate, with small notch at middle third; lateral angles rounded. Paramere: Simple, straight; anterior lobe convex, continuous with body, apex ending in a slender projection with sharp apical tooth (Fig. 17).

Female genitalia: Plica narrowly, Ushaped; gonocoxae I squarish, in caudal view closed, in lateral view almost straight, upper border rounded. Spermatheca: Bulb somewhat elongate; spermathecal duct moderately coiled proximally, with two coiled distally; flank distinct; chamber more or less globose (Fig. 16).

Integument: Body surface densely covered with long to short decumbent to suberect hairs; head, calli, clavus, corium, prosternum, mesosternum, and metasternum impunctate; pronotum strongly punctate and abruptly striate; scutellum punctate, except lateral margin; propleura, posterior


Fig. 19. Dorsal view of Alcocemiclla limonensis.
margin of metapleura, acetabulae, and pleural abdominal sterna scarcely punctate; metapleura weakly tuberculate; antennal segments and legs densely covered with short
decumbent to suberect setae; calli, pronotal disc, and abdominal sterna III with conspicuous creamy-yellow callosities like-tubercles or irregular spots.

Etymology.-Named for Eusebio Juaristi Cosio, distinguished Mexican chemist.

Type species.-Juaristiella pacificae Brailovsky, new species.

# Juaristiella pacificae Brailovsky, new species 

(Figs. 3, 7, 16-17, 20)
Description.-Measurements: Male: Head length 1.45 ; width across eyes 1.95 ; interocular space 1.17; interocellar space 0.51 ; distance ocellus to eye 0.21 ; diameter of ocellus 0.12 ; preocular distance 1.05 ; length antennal segments: I, 3.10; II, 2.50; III, 2.35; IV, 3.30; length rostral segments: I, 0.58 ; II, 0.55 ; III, 0.49 ; IV, 0.70 . Pronotum: Total length 3.95 ; width across frontal angles 2.10 ; width across humeral angles 5.00. Scutellar length 4.25; maximum width of anterior lobe 2.00 ; maximum width of posterior lobe 1.32. Hind leg: femur length 7.52; tibia length 5.16. Total body length 17.52.

Female: Head length 1.35; width across eyes 1.87 ; interocular space 1.17 ; interocellar space 0.74 ; distance ocellus to eye 0.18 ; diameter of ocellus 0.15 ; preocular distance 1.00; length antennal segments: I, 2.60; II, 2.05; III, 2.00; IV, 3.00; length rostral segments: I, 0.65 ; II, 0.49 ; III, 0.46; IV, 0.68 . Pronotum: Total length 3.70 ; width across frontal angles 2.05 ; width across humeral angles 4.70 . Scutellar length 3.30 ; maximum width of anterior lobe 1.80; maximum width of posterior lobe 1.10 . Hind leg: femur length 6.68; tibia length 4.78. Total body length 14.94 .

Dorsal coloration: Male: Head bright chestnut orange; antennal segments I to III orange, and IV orange with red reflections; pronotum dirty orange with punctures pale brown, calli bright orange, following areas black: anterolateral borders including spines and tubercles, and a medial longitudinal stripe running from anterior to posterior margin; callosities of pronotal disc bright orange to creamy yellow; scutellum orange yellow with medial, and lateral longitudinal stripes reddish brown; clavus dark
yellow orange with claval vein brown; corium dark yellow orange with brown longitudinal stripes between veins; hemelytral membrane dark ambarine, veins and basal angle reddish brown; connexival segments III to IV orange yellow, upper margin with short reddish brown longitudinal stripe, segment VII black with distal third dirty yellow; dorsal abdominal segments I to middle third of VI pale brown, abdominal scars IV-V and V-VI yellow; distal third of abdominal segment VI, and segment VII black. Ventral coloration: Head chestnut orange with medial longitudinal stripe black; rostral segments orange yellow with red reflections (apical third of IV red brown); prosternum pale brown; mesosternum chestnut orange, medial longitudinal stripe, and anterior tubercle pale reddish brown; metasternum bright dark reddish brown, medial longitudinal stripe bright chestnut orange; propleuron dirty yellow with punctures reddish brown, and a large anterior orange yellow callosity; mesopleuron reddish brown with two large orange yellow callosities; metapleuron reddish brown, posterior margin dirty yellow with brown punctures and three large orange yellow callosities; acetabulae dirty yellow with pale brown punctures; anterior and posterior lobes of metathoracic peritreme pale yellow; fore and middle legs chestnut orange; hind leg with coxa, trochanter, femur, and outer face of tibia bright reddish brown with tubercles of femur, and inner face and apical spine of tibia yellow to chestnut orange; tarsus chestnut orange to yellow; abdominal sterna III to VI dark chestnut orange with creamy yellow callosities on sterna III and IV; sternite VII dark chestnut orange, posterior third reddish brown; genital capsule reddish black with dark orange reflections; pleural margin of sterna III to VI yellow, VII black with apical third dirty yellow; spiracles creamy yellow.

Female: Similar to male. Connexival segments VIII and IX black, posterior angle pale orange yellow; abdominal segments VIII and IX black, lateral margins chestnut

lateral borders of pronotum dirty yellow, spines and tubercles black to reddish brown. 4, Outer face of hind tibia with anterior third bright reddish brown, posterior third yellow with or without reddish brown longitudinal stripes. 5, Abdominal sterna III and IV of female with or without creamy yellow callosities lateral to middle line.

Type material.-Holotype: ठ, Bolivia, Prov. Sara (without further data), Steinbach (AMNH). Paratypes: BOLIVIA: 1 す, 3 q Prov. Sara (without data), Steinbach (AMNH, UNAM); 1 ㅇ, Jungas de la Paz (without data), V. Linnaea (ZMB); PERU: 2 ㅇ, Junjin, between San Ramon de Pangoa and Sonomoro, 40 km . SE Satipo ( 750 m ), 10 January 1972, R. T. and J. C. Schuh (AMNH, UNAM); 1 ô, Tingo Maria, Huanuco ( 700 m ), July 1974, C. Bordon (UNAM); 1 đ̊, 2 ¢, Tingo Maria, Monzon Valley, 12 October 1954, and 2 November 1954, E. I. Schlinger and E. S. Ross (CAS). 1 ㅇ, Ob Madre de Dios ( 500 m), V. Garlepp (ZMB); ECUADOR: 19 , Prov. Napo, Tena ( 400 m ), February 1983, M. Sharkey (UNAM).

Etymology.-Named for its occurrence in the Pacific slope.

Distribution.-Known only from the transandean slope including Ecuador, Peru, and Bolivia.

## Larraldiella Brailovsky, new genus

Diagnosis.-Larraldiella like Gracchus share the following characters: head ventrally and behind buccula without tubercle, triangular process of pronotum absent, scutellum without Y-shaped elevation, dorsal surface of hind femur smooth, humeral angles subacute, mesosternum flat, lobes of posterior margin of mesosternum and anterior margin of metasternum remarkably small and in the same relative position, middle third of posterior margin of metasternum flat, without lateral lobes (Figs. 11-12).

In Larraldiella the scutellum conspicuously slender, metapleura not laterally expanded, hind femur relatively slender, inner
face of hind tibia scarcely exposed, abdominal sternite III of the male has small lateral prominences, spiracle is not visible in dorsal view, and abdominal sternite VII of male not laterally expanded. Each of these characters are opposite in Gracchus, including the abdominal sternite III of the male being smooth, without lateral prominences or tubercles.

Generic description.-Head: Distance between ocelli 2.6 times the diameter of one ocellus; distance between ocellus to eye 1.6 to 2.0 times the diameter of one ocellus; head ventrally and behind buccula without tubercle: rostrum almost reaching middle third of mesosternum; rostral segment III shortest, IV equal than I, and longer than II.

Thorax: Pronotum: Humeral angles slightly projecting; anterolateral borders obliquely straight, smooth, emarginated; posterior border barely convex; triangular processes absent. Mesosternumm flat, anterior margin in front of area between fore legs produced into narrowed subacute tubercle, posterior margin between middle legs subelevated, bilobed, each lobe remarkably short, well separated from mesial line and in the same relative position as lobes of anterior margin of metasternum; metasternum slender, rectangular, anterior margin with two small lobes, separated along midline by a wide furrow; each lobe touching the two lobes of posterior margin of mesosternum; posterior margin of metasternum straight, lateral angles projected into broad rectangular plate, lying against metacoxae, and at middle third entirely flat (Fig. 11); lateral margin of mesopleura raised on a short tubercle, not overlapping posterior margin of propleura; metathorax laterally slightly expanded, in dorsal view with metapleura and acetabulae scarcely visible. Anterior lobe of metathoracic peritreme almost reniform (Fig. 5).

Legs: Hind coxa well separated, distance between them nearly 2.7 to 2.9 diameter of one coxa, outer apical angle scarcely tuberculate; hind trochanter convex; fore and middle femora relatively slender, unarmed;


Fig. 21. Dorsal view of Larraldiella terminalis.
hind femur slightly incrassatte, almost attaining anterior margin of last abdominal sternite, dorsal surface smooth, ventrally armed with spines and tubercles in two ir-
regular rows, without a strong tooth close to base; inner margin of hind tibia scarcely expanded, apically armed with a slender and relatively long spine.

Scutellum: 1.8 to 2.2 times longer than wide, elongate, clearly tringular, longer than clavus, not contracted near base; dise without Y-shaped elevation; apex bifid; lateral margins emarginated.

Abdomen: Abdominal sternite II visible, slender, without conical tubercle; abdominal sternite III clearly expanded, in dorsal view with spiracle not visible; male abdominal sternite III laterally produced into two small protuberances; female abdominal sternite III flat, without lateral prominences.

Male genitalia: Genital capsule simple, semiglobose; posteroventral edge entire, straight, with medial irregular plate, and laterally with angles rounded.

Integument: Dorsal surface almost glabrous, ventrally with few erect setae on mesosternum and abdominal sterna; head, calli, prosternum, mesosternum, metasternum, and abdominal sterna impunctate; pronotum strongly punctate, striate; scutellum with scattered punctures, striate, except lateral margins; clavus, corium, propleuron, posterior margin of metapleuron, and acetabulae punctate; metapleura not tuberculate; antennal segments and legs finely covered with short decumbent to suberect setae.

Etymology.-Named for Carlos Larralde Rangel, distinguished Mexican immunologist.

Type species.-Larraldiella terminalis Brailovsky, new species.

## Larraldiella terminalis Brailovsky, new species

(Figs. 5, 11, 21)
Description.-Measurements: Male: Head length 1.16; width across eyes 1.92; interocular space 0.96; interocellar space 0.30 ; distance ocellus to eye 0.19 ; diameter of ocellus 0.12 ; preocular distance 0.74 ; length antennal segments: I, 2.08; II, 2.00; III and IV absent; length rostral segments: I, 0.62; II, 0.60; III, 0.37; IV, 0.62. Pronotum: Total length 2.56 ; width across frontal angles 1.84; width across humeral angles 3.28. Scutellar length 2.92; maximum width of anterior lobe 1.36 ; maximum width of
posterior lobe 0.48. Hind leg: femur length 5.27; tibia length 2.91. Total body length 11.75.

Female: Head length 1.28; width across eyes 1.96; interocular space 1.08 ; interocellar space 0.32; distance ocellus to eye 0.24 ; diameter of ocellus 0.12 ; preocular distance 0.80 ; length antennal segments: I, 2.00; II, 1.96; III, 1.68; IV, 2.60; length rostral segments: I, 0.65 ; II, 0.62; III, 0.42; IV, 0.65 . Pronotum: Total length 2.64 ; width across frontal angles 1.84 ; width across humeral angles 3.44 . Scutellar length 2.60 ; maximum width of anterior lobe 1.40 ; maximum width of posterior lobe 0.44 . Hind leg: femur length 5.20 ; tibia length 3.41. Total body length 11.77 .

Dorsal coloration: Male: Head, antennal segments I and II (III and IV absent), pronotum and scutellum chestnut orange; clavus chestnut yellow, punctures reddish brown; endocorium pale red, exocorium chestnut yellow with punctures pale red; hemelytral membrane dark ambarine, veins and basal angle black; connexival segments III to V yellow, VI and VII yellow with anterior third bright orange; abdominal segments bright orange. Ventral coloration: Including rostral segments (apex of IV black), legs, metathoracic peritreme, and genital capsule pale yellow; hind tibia yellow with two reddish-brown rings, one basally the other distally.

Female: Similar to male. Antennal segments I to III chestnut orange, and IV dark reddish orange; scutellum basally with rounded chestnut orange spot near middle third; connexival segments III to VI yellow with anterior third or anterior half dark orange, and segments VII to IX dark orange; abdominal segments II to IX bright to dark orange; genital plates yellow.

Type material.-Holotype: ơ, Brazil, Amazonas, Manaus, 13 January 1956, Elias and Roppa (MNR). Paratypes: BRAZIL: 1 i, Amazonas, Manaus, 20 January 1956, and 8 November 1956, Elias and Roppa (MNR); 1 \&, Amazonas, Humaita, August 1980, G. S. Andrade (UNAM).


Fig. 22. Dorsal view of Soteloniella perpaninla.

Etymology.-Named for the terminal section of the scutellum; from the latin, Terminalis.

Distribution.-Known only from Brazil.

Possaniella Brailovsky, new genus
Diagnosis.—Possaniella Brailovsky new genus, and Meropachys Burmeister, are the
only known genera in the tribe Meropachydini that have the hind femur clavate, slender towards the base, and abruptly incrassate before midlength. The other genera have the hind femur uniformly incrassate. Possaniella shares with Meropachys the following additional characters: scutellum clearly contracted near the middle third, triangular process of pronotum broad, anterior margin of mesosternum conspicuously raised on a compressed tubercle, and posterior margin of metasternum flat, not bil.

Possaniella differs from Meropachys by the following characters: head ventrally and behind buccula strongly tuberculate, buccula almost quadrate, short, not extending beyond the antenniferous tubercles, posterior margin of mesosternum bilobed, anterior margin of metasternum bilobed, and pronotal disc without tubercles. In Meropachys the head ventrally and behind buccula without tubercle, buccula rectangular extending beyond antenniferous tubercles and reaching behind middle of head, posterior margin of mesosternum trilobed (Fig. 9), anterior margin of metasternum flat, and pronotal disc densely tuberculate.

Generic description.-Head: Distance between ocelli 5.0 times the diameter of one ocellus; distance between ocellus to eye 1.4 times the diameter of one ocellus; head ventrally and behind buccula strongly tuberculate; rostrum short, barely reaching anterior third of mesosternum; rostral segment III shortest, IV longest, I longer than II.

Thorax: Pronotum: Humeral angles obtuse, not projecting; anterolateral borders obliquely straight, smooth, not emarginate; posterior border barely straight, with triangular process broad, apically rounded. Mesosternum not raised, anterior margin in front between fore legs conspicuously raised into flat plate, posterior margin between middle legs prominent, bilobed, with each lobe well separated from mesial line and overlapping with lobes of anterior margin of metasternum; metasternum slender, rectangular, anterior margin raised on two
large lobes, separated along midline by a wide furrow; each lobe connected with the two lobes of posterior margin of mesosternum; posterior margin of metasternum almost straight, with lateral angles projected into broad rectangular plate, laying against metacoxae, at middle third entirely flat; lateral margin of mesopleura raised on an elongate tubercle overlapping posterior margin of propleura; metathorax laterally expanded, in dorsal view with metapleuron and acetabulae broadly visible. Anterior lobe of metathoracic peritreme hatchetshaped.

Legs: Hind coxae well separated, distance between them nearly 4.2 times diameter of one coxa, with outer apical angle weakly tuberculate; hind trochanter convex; fore and middle femora relatively slender, ventrally with two irregular rows of tubercles; hind femur markedly clavate, slender towards base and behind middle abruptly incrassate, attaining posterior margin of abdominal sternite VI, dorsal surface with two rows of small tubercles, ventrally biseriately spined and tuberculate, without a strong tooth close to base; inner margin of hind tibia well expanded.

Scutellum: 1.8 times longer than wide, longer than clavus, clearly contracted near middle third; disc with short Y-shaped elevation restricted to basal half; apex rounded; lateral margins clearly emarginate.

Abdomen: Abdominal sternite II visible, slender, with conical tubercle close to hind coxae; abdominal sternite III clearly expanded, flat, without conical tubercles, in dorsal view with spiracle visible.

Integument: Body surface with short, uniformly decumbent to erect hairs; head, calli, clavus, corium, prosternum, mesosternum, metasternum and abdominal sterna impunctate; pronotum finely punctate, weakly striate; scutellum finely punctate, except lateral margins and Y -shaped elevation (arms of Y-shaped weakly striate); propleuron, posterior margin of metapleuron, and acetabulae finely punctate; metapleuron weakly tuberculate; antennal seg-
ments and legs densely covered with short decumbent to suberect setae.

Etymology.—Named for Lourival Domingos Possani Postay, distinguished Mexican biochemist.

Type species.-Possaniella oblata Brailovsky, new species.

## Possaniella oblata Brailovsky, new species

(Fig. 23)
Description.-Measurements: Female: Head length 1.70; width across eyes 2.25; interocular space 1.25; interocellar space 0.62 ; distance ocellus to eye 0.18 ; diameter of ocellus 0.12 ; preocular distance 1.17; length antennal segments: I, 2.85; II, 2.25; III, 2.10; IV, 3.30; length rostral segments: I, 0.65 ; II, 0.62 ; III, 0.52 ; IV, 0.70 . Pronotum: Total length 4.65 ; width across frontal angles 2.65; width across humeral angles 5.50. Scutellar length 4.35; maximum width of anterior lobe 2.40; maximum width of posterior lobe 1.80. Hind leg: femur length 7.60; tibia length 5.50 . Total body length 16.50.

Dorsal coloration: Head included antennal segments I to IV bright chestnut orange; pronotum bright chestnut orange, posterior margin (except middle third and triangular process) and three irregular longitudinal stripes dark brown; scutellum with basal half chestnut orange, apical half dirty yellow, and both with a wide longitudinal medial stripe reddish brown; clavus black with vein yellow; corium dark brown with veins and apical half of costal border, dirty yellow; hemelytral membrane dark ambarine, veins and basal angle black; connexival segment III dark brown with posterior angle chestnut yellow, segments IV and V with anterior half dark brown and posterior half chestnut yellow, segment VI chestnut yellow with upper border dark brown, VII to IX dark brown; abdominal segments dark brown to black with scars IV-V and V-VI yellow. Ventral coloration: Included rostral segments I to IV and fore and middle legs chestnut orange with following areas black
to reddish brown: apex of rostral segment IV, anterior tubercle and lateral margins of mesosternum, tarsi, area around metathoracic peritreme, middle third of metasternum, upper margin of hind acetabulae, abdominal sterna II and III, pleural abdominal margin III and anterior third of IV, posterior border of sterna V and VI, plica, posterior margin of sterna VII and great portion of genital plates; hind leg bright chestnut orange, spines, tubercles, two wide irregular rings on femur one distally the other close to middle third, and inner margin of tibia black.

Male.-Unknown.
Type material.--Holotype: 우, Brazil, Santarem, July 1919, S. M. Klages (CMN).

Etymology.-Named for its obese shape; from the latin oblatus.

Distribution.-Known only from the type locality, Brazil.

## Soteloniella Brailovsky, new genus

Diagnosis.-Soteloniella shares the following characters with Marichisme: head ventrally smooth, without conical tubercle behind buccula, triangular process on pronotum absent, posterior margin of mesosternum produced in two large lobes freely projecting backwards and bending up, not touching the anterior lobes of metasternum, and posterior margin of metasternum at middle third with deep capsule-like depression. In Soteloniella the scutellum is remarkably elongate, at least 3.3 to 3.8 times longer than wide and apically acute, anterior margin of thoracic mesopleuron without black spot, hind trochanter tuberculate, exposed, and dorsal surface of hind femur weakly tuberculate from base to middle third. In Marichisme the scutellum shorter, 1.7 to 2.2 times longer than wide and apically rounded, anterior margin of thoracic mesopleura with black elongate spot, hind trochanter slightly convex, not exposed, and dorsal surface of hind femur conspicuously tuberculate from base to apex.

Generic description.-Head: Distance between ocelli 2.4 to 3.0 times the diameter


Fig. 23. Dorsal view of Possaniella oblata.
of one ocellus; distance between ocellus to eye 1.0 times or less the diameter of one ocellus; head ventrally and behind buccula without tubercle or with an irregular callos-
ity; rostrum short, barely reaching anterior third of mesosternum; rostral segment III shortest, IV longest, I longer than II.

Thorax: Pronotum: Humeral angles
barely exposed; anterolateral borders obliquely straight, almost smooth, not emarginate; posterior border barely straight: triangular process absent. Mesosternum not raised, anterior margin in front of area between fore legs produced into narrowed subacute tubercle, posterior margin between middle legs prominent, bilobed, with each lobe well separated from mesial line and overlapping with lobes of anterior margin of metasternum; metasternum slender, rectangular, anterior margin remarkably raised on two large lobes, separated along midline by a wide furrow; each lobe touching the two lobes of posterior margin of mesosternum; posterior margin of metasternum almost straight, lateral angles projected into broad rectangular plate, lying against metacoxae, and at middle third with a deep hemispherical capsule-like depression (Fig. 13); lateral margin of mesopleura raised on a short elongate callosity; metathorax laterally expanded, in dorsal view metapleura and acetabulae remarkably visible. Anterior lobe of metathoracic peritreme vermiform, elongate, weakly curved upward (Fig. 2).

Legs: Hind coxae strongly separated, distance between them nearly 3.4 to 3.7 times the diameter of one coxa, with outer apical angle scarcely tuberculate; hind trochanter conspicuously projected on a wide and large tubercle; fore and middle femora relatively slender, armed with one to three subapical tubercles; hind femur markedly incrassate, not attaining apex of abdomen, reaching middle third of abdominal sternite VI, dorsal surface biseriately tuberculate from base to middle third or only basally, and ventrally strongly armed with spines and tubercles in two irregular rows, with a strong tooth close to the base; inner margin of hind tibia markedly expanded.

Scutellum: 3.3 to 3.8 times longer than wide, conspicuously elongate, lanceolate, longer than clavus, contracted near base; disc with Y-shaped elevation; apex subacute; lateral margins clearly emarginate.

Abdomen: Abdominal sternite II visible, slender, with or without conical tubercle lo-
cated close to posterior border of metathorax; abdominal sternite III clearly expanded, in dorsal view with spiracle visible.

Male genitalia: Genital capsule simple, semiglobose; posteroventral edge entire, straight, lateral angles rounded.

Integument: Body surface with short decumbent to suberect hairs; head, calli, clavus, corium, prosternum, mesosternum, metasternum, and abdominal sterna impunctate; pronotum strongly punctate, abruptly striate; scutellum punctate, except lateral margins and Y -shaped elevation (arms of Y-shaped elevation finely punctate); propleuron, posterior margin of metapleuron, and acetabulae punctate; metapleuron weakly tuberculate; antennal segments and legs densely covered with short decumbent to suberect setae.

Etymology.-Named for Julio Sotelo Morales, distinguished Mexican neurologist.

Type species.-Soteloniella scutellata Brailovsky, new species.

## Soteloniella scutellata Brailovsky, new species

Description.-Measurements: Male: Head length 1.60; width across eyes 2.20; interocular space 1.15; interocellar space 0.47 ; distance ocellus to eye 0.15 ; diameter of ocellus 0.17; preocular distance 1.07; length antennal segments: I, 3.75; II, 3.05; III and IV absent; length rostral segments: I, 0.77 ; II, 0.58 ; III, 0.53 ; IV, 0.80 . Pronotum: Total length 4.30; width across frontal angles 2.50 ; width across humeral angles 5.00. Scutellar length 7.55 ; maximum width of anterior lobe 2.00; maximum width of posterior lobe 1.95. Hind leg: femur length 8.74; tibia length 4.78. Total body length 19.10.

Dorsal coloration: Head bright chestnut orange; antennal segment I with outer surface bright red orange, and inner face chestnut orange; segment II chestnut orange; pronotum orange yellow with punctures, space between calli, and lateral margin of callus bright red orange; scutellum yellow
with punctures and space between arms of Y-shaped elevation reddish brown to bright red orange; clavus and corium dark brown to dark orange with veins yellow; hemelytral membrane dark ambarine with veins and basal angle black; connexival segments III to VI with upper margin pale yellow and inner margin pale chestnut orange, and VII black; abdominal segments I to VI pale orange yellow, and VII black. Ventral coloration: Including rostral segments (apex of IV black) and metathoracic peritreme chestnut orange, with mesosternum and posterior margin of abdominal sternite VII bright to dull black; lateral margin of mesosternum, metasternum, and abdominal sternite II bright red orange; following areas yellow: irregular spots on propleuron, posterior margin and lateral margin of mesopleuron, posterior margin of metapleuron, and pleural margin of abdominal sterna II to VII; fore and middle legs dark orange yellow, and hind leg with coxae chestnut orange, trochanter bright reddish brown, femur and tarsi bright chestnut orange, and tibia bright black to reddish black.

Female.-Unknown.
Type material.-Holotype: ठ̄, Brazil, Kollur Bolioto, 3 October 1975 L. P. Albo and J. B. Moraes (UNAM).

Etymology.—The specific epithet refers to the remarkably developed scutellum.

Distribution.-Known only from the type locality, Brazil.

## Soteloniella perparvula Brailovsky, new species

(Figs. 2, 13, 22)
Description.-Measurements: Male: Head length 1.50; width across eyes 2.05; interocular space 1.10; interocellar space 0.45 ; distance ocellus to eye 0.16 ; diameter of ocellus 0.14 ; preocular distance 1.00 ; length antennal segments: I, 3.45; II, 2.80; III, 2.75; IV, 4.55; length rostral segments: I, 0.68 ; II, 0.58 ; III, $0.51 ; \mathrm{IV}, 0.77$. Pronotum: Total length 3.60 ; width across frontal angles 2.10 ; width across humeral angles 4.00. Scutellar length 5.04; maximum width
of anterior lobe 1.65; maximum width of posterior lobe 1.30. Hind leg: femur length 6.90; tibia length 4.40. Total body length 16.10.

Dorsal coloration: Head and pronotum chestnut orange; space between calli and lateral margin of each callus reddish orange; antennal segment I with outer surface bright red orange and inner face bright chestnut orange; segments II to IV bright reddish orange; scutellum bright chestnut orange, space between arms of Y-shaped elevation bright reddish orange; clavus and corium dark brown to dark orange, veins yellow; hemelytral membrane dark ambarine, veins and basal angle black; connexival segments III to VI orange yellow, VII black; abdominal segments I to basal half of V pale orange; distal half of V and VI dark orange, VII darker; abdominal scars IV-V and V-VI pale yellow. Ventral coloration: Including rostral segments (apex of IV black) and metathoracic peritreme bright orange yellow; following areas bright red orange: lateral margin of mesosternum, upper margin of hind acetabulae, metasternum, and posterior margin of genital capsule (lateral margin of genital capsule pale yellow orange); fore and middle legs pale orange yellow; hind leg with coxa, trochanter, femur and tarsus chestnut orange; hind tibia with inner and outer margins reddish brown, and middle third with ventral face bright orange and dorsal face bright orange with pale yellow ring.

Female.-Unknown.
Type material.-Holotype $\delta$, Brazil, Amazonas, Tefé, 27-31 July 1956, M. Alvarenga (MNR). Paratype, BRAZIL: 1 oे, Amazonas, Manaus, 4 November 1955, Elias and Roppa (UNAM).

Etymology.-Named for its small size, the smallest known species of the genus.

Distribution.-Known only from Brazil.
Key to The Species of Soteloniella

1. Dorsal surface of hind femur strongly biseriately tuberculate from base to middle third; abdominal sternite Il without lateral conical tu-
bercle close to posterior margin of metathorax; hind tibia entirely bright black to bright reddish black; body size longer than 19.00 mm ; total length of scutellum longer than 7.20 mm . .

Soteloniella scutellata, n. sp.

- Dorsal surface of hind femur only weakly biseriately tuberculate basally; abdominal sternite II with large conical tubercle close to posterior border of metathorax; hind tibia not entirely bright black to bright reddish black; body size shorter than 16.20 mm ; total length of scutellum shorter than 5.20 mm (Fig. 22)

Soteloniella perparvula, n. sp.

## Peranthus Stål

Peranthus Stål 1867: 536
Menardus Distant 1900: 366. New synonym.

Walker (1871) included in the genus Meropachys one new species notatus collected in Brazil. Years later Distant (1900) described the genus Menardus to include notatus with the binomial Menardus notatus (Walker) comb. nov. Examination of the male lectotype of Meropachys notatus deposited in BMNH, as well as the male lectotype of Peranthus longicornis deposited in BMNH, and the male holotype of Peranthus virescens (Erichson) deposited in ZMB, shows that both genera are the same, and, for that reason, Menardus is here synonymized under Peranthus. The species Menardus notatus is thus transferred to Peranthus and the new combination Peranthus notatus (Walker) results.

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